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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|----------------------------------------------------------------------------------------------------------------------------------------|-------------|----------------------|----------------------------|------------------|
| 10/688,999 | 10/21/2003 | Gregory Plos | 06028.0030-00000 | 4371 |
| 22852 7590 03/23/2007 FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP 901 NEW YORK AVENUE, NW WASHINGTON, DC 20001-4413 | | | EXAMINER ELHILO, EISA B | |
| | | | ART UNIT 1751 | PAPER NUMBER |
| SHORTENED STATUTORY PERIOD OF RESPONSE | | MAIL DATE | DELIVERY MODE | |
| 3 MONTHS | | 03/23/2007 | PAPER | |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/688,999

Applicant(s)

PLOS ET AL.

Examiner

Eisa B. Elhilo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5-15,18-20 and 24-41 is/are pending in the application.
- 4a) Of the above claim(s) 18-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-15 and 24-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1 A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/19/2007 has been entered.

2 The cancellation of claims 4, 16-17 and 21-23 is acknowledged.

3 The limitation in claim 1 (the methine and azomethine dyes of formula (VI)) and claims 18-20 are withdrawn from consideration by the Examiner as being drawn to a non-elected invention as set forth in the previous office action that mailed on 10/03/2005. Therefore, pending claims are 1(excludes formula (VI)), 2-3, 5-15 and 24-41.

Claim Rejections - 35 USC § 103

4 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 24-37 and 39-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Malle et al. (US 5,931,973) in view of Chassot et al. (US 6,231,622 B1).

Malle et al. (US' 973) teaches a process for dyeing hair comprising applying to the hair a dyeing composition comprising triaminotriphenylmethane (arylmethane) dyes of Basic violet 1 (triaminotriphenylmethane of a formula (I)) and Basic blue 26 (triaminonaphthylidiphenylmethane of a formula (III)) as claimed in claims 1-2 (see col. 15, lines

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63-65) and wherein the dyeing composition allowed to remain on the hair for approximately 3 to 60 minutes before rinsing the hair (see col. 26, claim 22), wherein the leave-in time ranging from 3 to 60 minutes which falls within the upper limit of the claimed range as claimed in claim 24 and closed to the upper limit of claimed range as claimed in claim 25 (see col. 26, claim 22), wherein the direct dyes present in the composition is the amount of 0.05 to 10% which within the claimed range as claimed in claim 26 and overlapped with the claimed range as claimed in claim 27 (see col. 16, lines 8-10), wherein the pH of the composition is ranging from 4 to 11 as claimed in claims 28-29 (see col. 16, lines 49-54), wherein the composition further comprises surfactants such as anionic, cationic, nonionic and amphoteric surfactants as claimed in claim 33 (see col. 16, lines 35-36), wherein the process comprising applying to the hair a composition comprising oxidizing agent such as hydrogen peroxide or perborates which applied simultaneously to the hair at a pH above 7 (basic) as claimed in claims 34-37 and 39-40 (see col. 17, lines 17-20 and 48-56).

The instant claims differ from the reference by reciting a process for dyeing human keratin fibers comprising applying to the keratin fibers a dyeing composition at specific degrees of temperature and wherein the dyeing has specific CIELAB notation values as claimed.

Chassot et al. (US' 622 B1) in analogous art of hair dyeing formulation, teaches a process for dyeing hair comprising applying to the hair a dyeing composition comprising triphenylmethane dye compounds such as basic blue 26, Basic violet 1 and basic green 4 which are similar to the claimed formulae (I), (II) and (III) as claimed in claim 1 (see col. 3, lines 51 and line 58 and col. 4, line 19) and wherein the dye composition is applied to the hair at a

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temperature of 20 to 50 °C which within the claimed rangrs as claimed in claims 1 and 30-32 (see col. 13, claim 11).

Therefore, in view of the teaching of the secondary reference, one having ordinary skill in the art at the time the invention was made would be motivated to modify the process of Malle et al. (US' 973) by applying the dyeing composition to the hair at the claimed temperature as taught by Chassot et al. (US' 622 B1) to arrive at the claimed invention because the primary reference is silent about the temperature of the dyeing composition. Chassot et al. (US' 622 B1) as a secondary reference clearly teaches the claimed temperatures of the dyeing composition and thus, a person of the ordinary skill in the art would expect such a composition to be applied to the human hair at least at a room temperature and would expect such a method to have similar properties to those claimed, absent unexpected results.

5 Claims 5-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Malle et al. (US 5,931,973) in view of Chassot et al. (US 6,231,622 B1) and further in view of Chan et al. (US 5,474, 578).

The disclosures of Malle et al. (US' 973) and Chassot et al. (US' 622 B1) as described above do not teach or disclose the dyes as claimed.

However, Malle et al. (US' 973) suggests the use of triarylmethane dyes in a composition for dyeing hair (see col. 15, lines 61-65).

Chan et al. (US' 578) teaches in other analogous art of hair dyeing formulation, a composition comprising triarylmethane dyes of a formula (I) which is similar to the claimed formula (I), (II) and (III), when in the reference's formula (I), Z represents a substituted phenyl radical or a substituted naphthol radical, Y represents a hydrogen atom or an amino radical and

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R1 to R6 and W1 to W5 are independently hydrogen, halogen, alkyl or hydroxyl alkyl radicals as claimed in claims 5-13 (see col. 2, line14-51).

Therefore, in view of the teaching of the secondary reference, one having ordinary skill in the art at the time the invention was made would be motivated to modify the process of Malle et al. (US' 973) by incorporate the dyeing compounds as taught by Chan et al. (US' 578) to arrive at the claimed invention because the primary reference of Malle et al. (US' 973) suggests the use of triarylmethane in the dyeing composition. Chan et al. (US'578) as a secondary clearly teaches di- and tri-aminotriphenylmethane and triaminonaphthyldiphenylmethane as claimed, and thus, a person of the ordinary skill in the art would be motivated to incorporate these methane compounds as taught by Chan et al. in the dyeing composition of Malle et al. and would expect such a composition to be utilize with a method having similar properties to those claimed, absent unexpected results.

6 Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Malle et al. (US 5,931,973) in view of Chassot et al. (US 6,231,622 B1) and further in view of Said et al. (US 2004/0143910 A1).

The disclosures of Malle et al. (US' 973) and Chassot et al. (US' 622 B1) as described above do not teach or disclose the dyes of the claimed formula (IV).

However, Malle et al. (US' 973) suggests the use of triarylmethane dyes in a composition for dyeing hair (see col. 15, lines 61-65).

Said et al. (US' 910 A1) teaches in other analogous art of hair dyeing formulation, a composition comprising species of triarylmethane dyes such as Fuchsonimine hydrochloride

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(monoaminotriphenylmethane) as claimed in claims 14-15 (see sheet 1, formula (3) and page 2, paragraph, 0020).

Therefore, in view of the teaching of the secondary reference, one having ordinary skill in the art at the time the invention was made would be motivated to modify the process of Malle et al. (US' 973) by incorporate the dyeing component Fuchsonimie hydrochloride as taught by Said et al. et al. (US' 910 A1) to arrive at the claimed invention because the primary reference of Malle et al. (US' 973) suggests the use of triarylmethane in the dyeing composition. Said et al. (US' 910 A1) as a secondary reference clearly teaches the claimed species Fuchsonimie hydrochloride, and thus, a person of the ordinary skill in the art would be motivated to incorporate these methane compounds as taught by Said et al. in the dyeing composition of Malle et al. and would expect such a composition to be utilize with a method having similar properties to those claimed, absent unexpected results.

7 Claims 34-36, 38 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kunz et al. (US 6,171,347 B1).

Kunz et al. (US' 347 B1) teaches a stripping process for hair dyed with a combination of oxidative dyes and/or direct dyes by applying to the dyed hair a reductive composition comprising a sulfite and wherein the pH of the composition is 2.5 to 4 (acidic) and the action time of the stripper depending on the color to be removed and on the temperature (approximately 20 to 50 °C) is from 5 to 60 minutes and wherein the stripping process can be speeded up by adding heat as claimed as claimed in claims 34-35, 38 and 41 (see col. 10, lines 20-67) and wherein the direct dyes used for dyeing hair include arylmethane dyes such as Basic Basic Blue

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26, Violet 1 and Basic Green 1 as claimed in claims 36 (see col. 4, lines 51 and 58 and col. 5, line 16).

The instant claims differ from the reference by reciting stripping process for keratin fibers, which applied to the hair for a period of 4 minutes.

However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to be motivated to reduce the time of the stripping process to arrive at the claimed invention because Kunz et al. (US' 347 B1) clearly teaches that the action time of the stripping process depending on the color to be remove and on the temperature (see col. 10, lines 64-66), and, thus, a person of the ordinary skill in the art would be motivated to reduce the time of the stripping process by adjusting the degree of the temperature to be used in the process and would expect such a process to have similar properties to those claimed, absent unexpected results.

Response to Applicant's Arguments

8 Applicant's arguments filed 3/19/2007 have been fully considered but they are not persuasive.

With respect to the declaration provided by the applicant to show unexpected results of the claimed invention over the dyeing process of the prior art of record, the examiner's position is that the declaration is not commensurate in the scope with the dyeing composition utilized in the closest prior art of record because the dyes in the comparative data are selected from among a list of dyes taught in more than one prior art of record, wherein the comparative data should compare the claimed dyeing composition with the exemplified dyeing composition of the closest

prior art of record. Accordingly, the declaration is not commensurate in the scope with the teachings of the prior art of record.

The examiner advises applicants to delete the limitation of formula (VI) from claim 1 and to cancel claims 18-20 as non-elected claims. Further, the examiner advises applicants to provide a showing or data to demonstrate that the claimed dyes when used in the dyeing composition provided superior and unexpected results over the exemplified dyeing composition of the closest prior art of record that does not comprise any of the claimed dyes.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eisa B. Elhilo whose telephone number is (571) 272-1315. The examiner can normally be reached on M - F (8:00 -4:30).

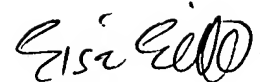
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas McGinty can be reached on (571) 272-1029. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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A handwritten signature in black ink, appearing to read 'Eisa Elhilo'.

Eisa Elhilo
Primary Examiner
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March 20, 2007